

Total Phosphorus by PhosVer3 with Acid Persulfate Digestion HACH 8190						Page 1 of 2
Facility Name: _____ VELAP ID _____						
Assessor Name: _____ Analyst Name: _____ Inspection Date _____						
Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments	
Records Examined: SOP Number/ Revision/ Date _____ Analyst: _____						
Sample ID: _____ Date of Sample Preparation: _____ Date of Analysis: _____						
Are samples collected in plastic or glass bottles that have been acid washed with 1:1 hydrochloric acid and rinsed with deionized water?	DOC316.53.01121 Pg. 4					
Is all glassware cleaned with phosphate-free detergent?	DOC316.53.01121 Pg. 4					
Are samples analyzed immediately or preserved up to 28 days by adjusting to pH<2 with sulfuric acid and storing at 4°C?	DOC316.53.01121 Pg. 4					
Are refrigerated samples warmed to room temperature and neutralized with 5N sodium hydroxide prior to analysis?	DOC316.53.01121 Pg. 4					
<b>If using a reactor or digestion block:</b>						
Is the reactor or digestion block preheated to 150°C?	DOC316.53.01121 Pg. 2					
Is 5 mL of sample pipetted into each vial?	DOC316.53.01121 Pg. 2					
Is one potassium persulfate powder pillow for phosphonate emptied into the vial?	DOC316.53.01121 Pg. 2					
Is each vial capped and shaken before inserting into the reactor or digestion block?	DOC316.53.01121 Pg. 2					
Are vials digested for 30 minutes and then cooled to room temperature?	DOC316.53.01121 Pg. 2					
<b>If using a hot plate:</b>						
Is 25 mL of sample poured into a 125 mL Erlenmeyer flask?	DOC316.53.01112 Pg. 2					
Is one potassium persulfate powder pillow added to each flask and mixed by swirling?	DOC316.53.01112 Pg. 2					

Notes/ Comments:

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Assessor Name: \_\_\_\_\_ Analyst Name: \_\_\_\_\_ Inspection Date \_\_\_\_\_

Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
<b>If using a hot plate:</b>					
Is 2 mL of 5.25N sulfuric acid added to each flask? (A 1-mL calibrated dropper can be used.)	DOC316.53.01112 Pg. 2				
Are samples boiled gently for 30 minutes on a hot plate, without boiling to dryness, reducing to less than 20 mL?	DOC316.53.01112 Pg. 2				
After cooling samples to room temperature, is 2 mL of 5N sodium hydroxide added and mixed by swirling?	DOC316.53.01112 Pg. 2				
After adding sodium hydroxide, are samples brought back to 25 mL with deionized water?	DOC316.53.01112 Pg. 2				
<b>Following sample preparation:</b>					
Is 2 mL of 1.54N sodium hydroxide pipetted into each vial, capped, and mixed, following digestion?	DOC316.53.01121 Pg. 3				
Is each vial wiped prior to placing into the spectrophotometer?	DOC316.53.01121 Pg. 3				
Are samples read at 880 nm?	DOC316.53.01121 Pg. 6				
Is the spectrophotometer zeroed using the sample prior to addition of a PhosVer3 powder pillow?	DOC316.53.01121 Pg. 3				
Is a PhosVer3 powder pillow emptied into each digested vial, and are vials capped and shaken for 20-30 seconds?	DOC316.53.01121 Pg. 3				
Are sample vials wiped again and read within 2-8 minutes after adding PhosVer3 reagent when using test tubes in digestion block?	DOC316.53.01121 Pg. 3				
Is color development allowed to proceed for 10 minutes after adding the PhosVer3 reagent when using the Acid digestion on hot plate method?	DOC316.53.01121 Pg. 2				

Notes/ Comments: